LISTING OF THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A process for producing a metal strip using a two-roller casting device wherein the device comprises: ~~(1), in which metal melt (16) is introduced into~~ a melt pool ~~(14), which is~~ formed by two oppositely rotating casting rollers ~~(2, 3)~~ with respective casting-roller axes ~~(4, 5)~~ arranged parallel to one another and by two side plates ~~(6, 7)~~ which bear against ~~the~~ end sides ~~(17, 18)~~ of the casting rollers, ~~and in which an at least partially solidified metal strip (21) is conveyed out of~~ wherein a casting gap ~~(19)~~ is formed by ~~the~~ lateral surfaces of the casting rollers, ~~characterized~~ the process comprising:

introducing metal melt into the melt pool; conveying an at least partially solidified metal strip from the melt pool through the casting gap;

~~in that the side plates (6, 7), in~~ during a first time interval ~~(Δt_1),~~ ~~are moved~~ moving the side plates onto the end sides ~~(17, 18)~~ of the casting rollers in a first direction of movement parallel to the casting-roller axes ~~(4, 5)~~, and

~~in that the side plates (6, 7), in~~ during a second time interval ~~(Δt_2), are moved~~ , moving the side plates onto a portion of the lateral surfaces ~~(10, 11)~~ of the casting rollers in a second direction of movement parallel to the casting direction ~~(G)~~ in the casting gap ~~(19)~~.

2. (Currently Amended) The process as claimed in claim 1, ~~characterized in that, in chronological order,~~ wherein the first time interval ~~(Δt_1)~~ chronologically overlaps the second time interval ~~(Δt_2)~~ at least in a subsection of time.

3. (Currently Amended) The process as claimed in claim 1, ~~characterized in that, in chronological order,~~ wherein the second time interval ~~(Δt_2)~~ chronologically overlaps the first time interval ~~(Δt_1)~~ at least in a subsection of time.

4. (Currently Amended) The process as claimed in ~~one of the preceding claims, characterized in that~~ claim 1, wherein the first time interval ~~(Δt_1)~~ starts before the second time interval ~~(Δt_2)~~.

5. (Currently Amended) The process as claimed in ~~one of the preceding claims, characterized in that~~ claim 1, wherein the first time interval ~~(Δt_1)~~ starts not later than when the metal melt is fed into the melt pool ~~(14) or before this~~.

6. (Currently Amended) The process as claimed in ~~one of the preceding claims, characterized in that~~ claim 1, further comprising moving the side plates ~~(6, 7) are moved~~ onto the casting rollers ~~(2, 3)~~ as a function of the wear properties of the refractory material of the side plates ~~used~~.

7. (Currently Amended) The process as claimed in ~~one of the preceding claims 1 to 6, characterized in that~~ claim 1, wherein the first time interval ~~(Δt_1)~~ is ~~formed by~~ comprised of three ~~sections,~~ successive phases, including

[[·]] a starting phase, in which the side plates ~~(6, 7), during a time period of at most 90 sec,~~ are moved onto the end sides ~~(17, 18)~~ of the casting rollers at a first feed rate ~~(v_{st})~~ which corresponds to material wear to a material of the side plates in the melt pool during the starting phase ~~of less than 50 mm/h, preferably from 1 mm/h to 30 mm/h,~~

[[·]] a transition phase, in which the side plates~~, during a period of at most 3 min,~~ are moved onto the end sides of the casting rollers at a second feed rate ~~(v_{s2})~~ which corresponds to material wear to the side plates in the melt pool during the transition phase ~~of less than 20 mm/h,~~

[[·]] a steady-state operating phase, in which the side plates are moved onto the end sides of the casting rollers at a third feed rate ~~(v_{s3})~~ which corresponds to material wear to the side plates in the melt pool during the steady-state phase ~~of between 0.2 mm/h and 4 mm/h~~.

8. (Currently Amended) The process as claimed in ~~one of the preceding claims 1 to 6, characterized in that~~ claim 1, wherein the first time interval ~~(Δt_1)~~ is ~~formed by~~ comprised of three successive phases, including ~~sections~~,

[[·]] a starting phase, in which the side plates ~~(6, 7), during a period of at most 90 sec,~~ are pressed onto the end sides of the casting rollers with a first contact pressure ~~(p_{st})~~ which corresponds to material wear to the side plates in the melt pool during the starting phase ~~of less than 50 mm/h, preferably from 1 mm/h to 30 mm/h~~,

[[·]] a transition phase, in which the side plates~~, during a period of at most 3 min,~~ are pressed onto the end sides of the casting rollers with a second contact pressure ~~(p_{s2})~~ which corresponds to material wear to the side plates in the melt pool during the transition phase ~~of less than 20 mm/h~~,

[[·]] a steady-state operating phase, in which the side plates are pressed onto the end sides of the casting rollers with a third contact pressure ~~(p_{s3})~~ which corresponds to material wear to the side plates in the melt pool during the steady-state phase ~~of between 0.2 mm/h and 4 mm/h~~.

9. (Currently Amended) The process as claimed in ~~one of the preceding claims, characterized in that~~ claim 1, wherein the second time interval ~~(Δt_2)~~ starts ~~at the latest~~ not later than 30 min~~, preferably as early as 10 min~~, after the start of the first time interval ~~(Δt_1)~~.

10. (Currently Amended) The process as claimed in ~~one of the preceding claims, characterized in that~~ claim 7, wherein the second time interval ~~(Δt_2)~~ starts substantially at the start of the steady-state operating phase.

11. (Currently Amended) The process as claimed in ~~one of the preceding claims, characterized in that the side plates,~~ claim 1, wherein during the second time interval ~~(Δt_2)~~, moving or pressing the side plates ~~are moved/pressed~~ onto respective edge portions ~~a portion~~ of the lateral surface of the casting rollers at one of a feed rate ~~(v_{v1}, v_{v2})~~ or ~~with~~ a contact pressure ~~(p_{v1}, p_{v2})~~ which corresponds to material wear to the side plates in the melt pool ~~of 2 mm/h to 20 mm/h, preferably 4.0 to 10 mm/h~~.

12. (Currently Amended) The process as claimed in ~~one of claims 1 to 10, characterized in that the side plates (6, 7),~~ claim 1, wherein during the second time interval moving the side plates ~~(Δt_2), are moved~~ intermittently~~, with~~ comprising alternating movement phases and stationary phases ~~alternating and the stationary phases of the side plates not exceeding 30 min, preferably 5 min~~.

13. (Currently Amended) The process as claimed in claim 12, wherein ~~characterized in that the side plates (6, 7),~~ during each movement phase, the side plates are moved ~~0.01 to 2 mm, preferably 0.1 to 1 mm,~~ onto the edge portions ~~a portion~~ of the lateral surface ~~(10, 11)~~ of the casting rollers.

14. (Currently Amended) The process as claimed in ~~one of the preceding claims, characterized in that~~ claim 1, further comprising a grind-in phase directly preceding the first time interval ~~(Δt_1) is directly preceded by a grind-in phase, in which~~ and during the grind-in phase the side plates~~, during a period of at most 120 sec,~~ are pressed onto the end sides of the casting rollers at a feed rate or with a contact pressure which corresponds to a mean material wear to the side plates in the melt pool ~~of at least 10 mm/h, preferably at least 20 mm/h, the side plates, during a subsection of this grinding-in phase, if appropriate additionally being pressed onto a portion of the lateral surfaces of the casting rollers with a high contact pressure in the casting direction~~.

15. (Currently Amended) The process as claimed in ~~one of claims 1 to 13, characterized in that~~ claim 1, further comprising a grind-in phase preceding the first time interval ~~(Δt_1) is preceded by a grinding-in phase in which~~ causing a mean horizontal material wear to the side plates in the melt pool ~~of at least 0.3 mm is produced~~, ~~this~~ the grinding-in phase being carried out with cold or preheated side plates~~, and if appropriate intermediate heating being carried out between this grinding-in phase and the start of the first time interval (Δt_1)~~.

16. (Currently Amended) A two-roller casting device comprising:

~~having~~ two casting rollers ~~(2, 3), which are~~ arranged parallel to one another and ~~rotate~~ rotatable in opposite directions, having lateral surfaces which between them define a casting gap and having opposite end sides; [[, and]]

two side plates ~~(8, 9),~~ which bear against the opposite end sides ~~(17, 18)~~ of the casting rollers, and ~~are supported in~~ side-plate carrying ~~apparatuses (36), for carrying out the method as claimed in one of claims 1 to 14, characterized~~ apparatus supporting the side plates;

[[·]] ~~in that~~ each side-plate carrying device includes a ~~(36) has~~ horizontal ~~guides (41) for implementing~~ guide for causing a feed movement of the respective side plate ~~(8, 9)~~ in the direction of the casting-roller axes ~~(4, 5)~~,

[[·]] ~~in that~~ each side-plate carrying device includes ~~(36) is assigned~~ a horizontal-adjustment device ~~(42)~~ for horizontal displacement of the respective side plate ~~(8, 9)~~; ~~and~~

a first position-recording device ~~(44)~~ for recording the horizontal position of the side plate ~~(8, 9)~~,

[[·]] ~~in that~~ each side-plate carrying device including a ~~(36) has~~ vertical ~~guides (38)~~ guide for implementing a feed movement of the side plate ~~(8, 9)~~ in ~~the~~ a casting direction ~~(G)~~, based on the casting gap ~~(19)~~,

[[·]] ~~in that~~ each side-plate carrying device including ~~(36) is assigned~~ a vertical-adjustment device ~~(39)~~ operable for ~~the vertical displacement of~~ vertically displacing the side plate ~~(8, 9) and a position-recording device (45) for recording the vertical position of the side plate, in that a computer unit (46) is connected, via signal lines, to the horizontal-adjustment devices (42), the vertical-adjustment devices (39) and the position-recording devices (44, 45) in order to transmit measurement and control signals~~.

17. (Currently Amended) The two-roller casting device as claimed in claim [[16]] 38, further comprising ~~characterized in that~~ the horizontal-adjustment devices ~~(42)~~ and the vertical-adjustment devices have ~~(39) are assigned~~ individual contact pressure measuring devices ~~(47, 48)~~ operable for determining the contact pressure of the side plates ~~(8, 9)~~ on the casting rollers ~~(2, 3)~~ in the horizontal and vertical directions[[,]]; and

the horizontal-adjustment devices ~~(42)~~ and the vertical-adjustment devices ~~(39)~~ are connected to the computer unit ~~(46)~~ via signal lines.

18. (Currently Amended) The two-roller casting device as claimed in claim 17, ~~characterized in that~~ wherein the computer unit ~~(46)~~ is designed as an individual control circuit with a higher-level plant control system ~~(51)~~.

19. (Currently Amended) The two-roller casting device as claimed in ~~one of claims 16 to 18, characterized in that~~ claim 16, wherein the side-plate carrying device ~~(36) is formed by~~ comprises a basic frame ~~(40)~~, an adjustment frame ~~(37)~~ and a carrying frame ~~(8, 9)~~, the adjustment frame ~~(37) being~~ is supported on the basic frame ~~(40)~~ via horizontal guides ~~(41)~~, ~~and~~ the carrying frame ~~(8, 9)~~ for the side plate ~~(6, 7) being~~ is supported on the adjustment frame ~~(37)~~ via vertical guides ~~(38)~~, ~~and~~ the horizontal-adjustment device is ~~(42) being~~ arranged between the basic frame ~~(40)~~ and the adjustment frame ~~(37)~~ ; and

the vertical-adjustment device ~~(39) being~~ is arranged between the adjustment frame ~~(37)~~ and the carrying frame ~~(8, 9)~~ for the side plate ~~(6, 7)~~.

20. (Currently Amended) The two-roller casting device as claimed in ~~one of claims 16 to 19, characterized in that~~ claim 16, further comprising each side plate ~~(6, 7) is assigned~~ having a heating device.

21. (New) The process as claimed in claim 7, wherein

during the starting phase, the side plates are moved onto the end sides of the casting rollers during a time period of at most 90 sec and the first feed rate is less than 50 mm/h;

during the transition phase, the side plates are moved onto the end sides of the casting rollers during a time period of at most 3 min, at the second feed rate is less than 20 mm/h and;

during the steady-state phase, the side plates are moved onto the end sides of the casting rollers at the third fee rate of between 0.2 mm/h and 4 mm/h.

22. (New) The process as claimed in claim 21, wherein the first feed rate is from 1 mm/h to 30 mm/h.

23. (New) The process as claimed in claim 8, wherein

during the starting phase, the side plates are pressed onto the end sides of the casting roller during a period of at most 90 sec, and the first contact pressure is less than 50 mm/h;

during the transition phase, the side plates are pressed onto the end sides of the casting rollers during a period of at most 3 min at a second contact pressure of less than 20 mm/h; and

the third contact pressure during the steady-state phase corresponds to material wear to the side plates of between 0.2 mm/h and 4 mm/h.

24. (New) The process as claimed in claim 23, wherein the first contact pressure corresponds to material wear to the side plates of from 1 mm/h to 30 mm/h.

25. (New) The process as claimed in claim 9, wherein the second time interval starts as early as 10 min after the start of the first time interval.

26. (New) The process as claimed in claim 8, wherein the second time interval starts substantially at the start of the steady-state operating phase.

27. (New) The process as claimed in claim 11, wherein the material wear to the side plates is 2 mm/h to 20 mm/h.

28. (New) The process as claimed in claim 11, wherein the material wear to the side plates is 4 mm/h to 10 mm/h.

29. (New) The process as claimed in claim 12, wherein the stationary phases do not exceed 30 min.

30. (New) The process as claimed in claim 12, wherein the stationary phases do not exceed 5 min.

31. (New) The process as claimed in claim 13, wherein the side plates are moved 0.01 to 2mm.

32. (New) The process as claimed in claim 13, wherein the side plates are moved 0.1 to 1mm.

33. (New) The process as claimed in claim 14, wherein the side plates are pressed onto the end sides of the casting rollers during a subsection of this grinding-in phase, the side plates being additionally pressed onto a portion of the lateral surfaces of the casting rollers with a high contact pressure in the casting direction, which corresponds to mean material wear to the side plates of at least 10 mm/h.

34. (New) The process as claimed in claim 14, wherein the side plates are pressed onto the end sides of the casting rollers during a subsection of this grinding-in phase, the side plates being additionally pressed onto a portion of the lateral surfaces of the casting rollers with a high contact pressure in the casting direction, which corresponds to mean material wear to the side plates of at least 20 mm/h.

35. (New) The process as claimed in claim 14, wherein the side plates are pressed onto the end sides of the casting rollers during a subsection of this grinding-in phase, the side plates being additionally pressed onto a portion of the lateral surfaces of the casting rollers with a high contact pressure in the casting direction

36. (New) The process as claimed in claim 15, wherein the mean horizontal wear to the side plates is at least 0.33 mm.

37. (New) The process as claimed in claim 15, further comprising intermediate heating being carried out between the grinding-in phase and the start of the first time interval.

38. (New) The two roller casting devices of claim 16, further comprising:

a first position-recording device for recording the horizontal position of the side plate,

a second position-recording device for recording the vertical position of the side plate; and

a computer unit connected, via signal lines, to the horizontal-adjustment devices, the vertical-adjustment devices and the position-recording devices and operable to transmit measurement and control signals.